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ABSTRACT

This paper reviews the literature on the relevance of learner characteristics and learning styles when planning law school courses, focusing on the instructional delivery methods and teaching techniques applicable to law school courses. It examines the four major learning modalities: kinesthetic, tactual, auditory, and visual; and the four major instructional delivery methods applicable to each, including: (1) lecture, handout, discussion; (2) case study; (3) values clarification; and (4) role playing and mock trial. A major section of the paper covers the elements of hypermedia presentations, with discussions of various aspects of content quality (e.g., accuracy, completeness, distraction, need, social/political considerations, and structure) and design quality (e.g, color, image size, user control, type of media, animation, audio, navigation, record-keeping, security, and pacing). The paper notes that, increasingly, computer technology enables educators to use hypermedia packages for presentations. The paper argues that the challenge for law school professionals is to assess the learning-style characteristics of each student and then provide learning opportunities compatible with those characteristics. (Contains 50 references.) (MDM)



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Abstract

The primary purpose of this theoretical article was to review the relevance of learner characteristics/learning styles when planning school law courses. A secondary purpose was to review the literature to determine some of the instructional delivery methods and teaching techniques applicable for teaching school law courses. Data were provided through a comprehensive review of literature from the following areas: learning styles, learning modalities and selected teaching techniques, instructional delivery methods, and hypermedia presentations. One of the most significant challenges that university instructors face is to be tolerant and perceptive enough to recognize learning differences among students. Learning style, characterized as field-dependent and field-independent have been widely and extensively studied and has the broadest application to educational concerns. There are four major kinds of learning modalities: kinesthetic, tactual, auditory, and visual. The review of literature revealed four major instructional delivery methods for teaching school law courses. These delivery methods are: 1. Lecture, handout, discussion, 2. Case study, 3. Values classification, and 4. Role playing and mock trial. An increase emphasis on the use of the recent technologies -particularly computers -- along with the rapid developments in computer hardware and software have enabled educators to make greater usage of hypermedia packages in preparing and using presentations in educational environments. The challenge for school law professionals is to assess learning style characteristics of each student and to provide learning opportunities that are compatible with those characteristics. Therefore, having knowledge regarding learning styles of students can be of assistance to school law professionals in selecting instructional materials, teaching methods, and learning activities to be used in the teaching-learning process.



Selected Instructional Delivery Methods and Teaching Techniques for Teaching School Law Courses

The United States is moving toward a global, information-based economy, with an increasingly diverse work force. One result of these changes is a need for better-trained, competent teachers, professionals, and technicians who are capable of using complex technologies to improve services, increase quality, and raise productivity. Also, more jobs, require individuals to reason in high-level abstract terms in order to make inferences and solve intricate problems.

The conventional structure and delivery of education, however, are at odds with these societal changes.

Learning must be more effective and efficient. This need has given rise to the instructional design process, a planning method that is likelier to result in successful learning and performance. A better understanding of the learning process combined with extensive use of newer technological resources, holds the potential changes in the delivery of school law courses.

Purposes

The primary purpose of this theoretical article was to review the relevance of learner characteristics/learning styles when planning school law courses. A secondary purpose was to review selected instructional delivery methods and teaching techniques applicable for teaching school law courses.

Perspectives

Learning

Learning is an active process whereby the individual changes. Learning occurs as a result of a plan, of maturation, or by accident. Hosford (1993) summarized the many definitions of learning: "Learning has been defined as a change in the neurological system; a change in behavior; or as a process, a product, a function, and a reorganization." (p. 35) Learning is change -- change in attitudes, habits, knowledge, skills, values. Learning occurs naturally, as the individual grows, matures, is acted upon, and reacts to the environment. Every living creature learns,



but only humans plan, structure, and impose learning on themselves and others. Humans, unlike other animals, crave and seek the learning process. In whatever way learning is brought about, it is a process in which "...the learner opens up himself, [sic] he stretches himself, he reaches out, he incorporates new experience, he relates it to his previous experience, he reorganizes this experience, he expresses or unfolds what is latent within him" (Kidd 1973, p. 14).

Non-planned, non-structured learning occurs in every and all environments as a result of interactions between the individual and the environment, but planned and structured learning occurs primarily in one of two environments -- in the home and in formal institutional settings, such as the school or the church. Formal education is the planned organization of experience initiated to facilitate specific learning.

Pedagogy and Andragogy

Most of us, as both learners and teachers, are familiar with the educational process of pedagogy (derived from the Greek words paid, meaning "child," and agogus, meaning "leader;" so "pedagogy" means literally "the art and science of teaching children") which assumes that the instructor has the responsibility to determine what is to be learned and how it will be learned. Much of our class planning is centered around this concept and is driven by the needs of the academic discipline.

Andragogy (derived from the Greek words "aner," meaning man, and "agogus" meaning leader of) on the other hand, according to Knowles is based on several assumptions that may not fit the pedagogical model. They are: adults need to know why they need to learn something; adults are responsible for their own decisions; adults possess a greater volume and different quality of experience; adults are more likely to learn those things they need to know and adult learning is life centered, not subject centered (Knowles, 1980).

Learning Styles

Student learning styles are based upon the theory that there are different methods of gathering, organizing, and evaluating information. Some people have consistent ways of selecting information and have dominant styles while others are more flexible in their approaches. Some people prefer to learn a skill by manipulating concrete objects, some by listening, some by reading a manual and some by interacting with others. In brief, people have unique and



characteristics ways of using their mind (Kazmierski, 1977).

A study by Gordon (1996) revealed that paralegal majors exhibit greater preference for visual learning when compared to education and nursing majors. Although research has not produced conclusive evidence about learning styles, there is information about learning conditions and cognitive learning styles that can provide some insight into learning styles (Kemp, Morrison, & Ross, 1994).

Instructional Strategies

Decisions on the design of the instruction are made at two levels. One decision is the delivery strategy, which describes the general learning environment. General learning environments can range from a typical presentation to a highly interactive computer-based instruction lesson. These strategies are often classified according to the degree of individualization. Individualized instruction presents the content (or objectives) to each student at an appropriate rate of the individual (Kemp, Morrison, & Ross, 1994).

The second decision is the instructional strategy, which prescribes sequences and methods of instruction to achieve an objective. These prescriptions provide guidance on how to design instructional sequences, and they are generalizable to a number of delivery strategies (Kemp, Morrison, & Ross, 1994).

Sneelbecker (1994) has suggested that instructional design is the linking science that Dewey (1900) described. This science uses findings from educational and psychological research to develop sound instructional applications. This generative approach is consistent with the constructivist view (Lebow, 1994).

Learning is an active process in which the learner constructs meaningful relations between the new knowledge presented in the instruction and the learner's existing knowledge. A well designed instructional strategy prompts or motivates the learner actively to make these corrections between what the learner already knows and the new information. Jonassen (1985) and Wittrock (1974) described this learning processes as generative learning. The advantages of generative learning are better understanding and longer retention of what is learned (Kemp, Morrison, & Ross, 1994).

The individual classroom instructor is the best judge of what teaching techniques and strategies work most effectively with particular students in different classes. Since students are usually quiet curious about the law, student



disinterest in the lessons is not often evident. If the most successful fisherman is using the best bait, then the most successful teacher has opened the class with the most interesting bit of legal information which the class will want to learn more about (Carey, 1987).

Modes of Inquiry

Data were provided through a comprehensive review of related literature from the following four areas:

- 1. Learning Styles
- 2. Learning Modalities and Selected Teaching Techniques
- 3. Instructional Delivery Methods
- 4. Hypermedia Presentations

Review of Related Literature

Learning Styles

A number of factors that influence the educational process have emerged from research on human developmental stages and life phases. Learning style is one factor researchers claimed influenced student educational performance (Dunn & Dunn, 1979; Claxton & Murrell, 1987; Garger & Guild; 1984; Saracho, 1989; Witkin, 1973).

Learning style is not a new concept. However, because educational practitioners started to investigate learning styles at about the time most psychologists were losing interest, progress in the area has been slow (Keefe and Monk, 1986). Learning style has been defined as the "Composite of characteristic cognitive, affective, and psychological factors that serve as relatively stable indicators of how a learner perceives, interacts with, and responds to the learning environment" (Griggs 1991, p.7). Griggs (1991) noted that it is important to recognize that learning styles are not related to intelligence, mental ability or actual learning performance and that no particular learning style is better than another style.

Learning style research has been applied at an ever-increasing rate to the problems of education (Doebler & Eicke, 1979). Claxton and Murrell (1987) suggested that learning style could be an extremely important element in the



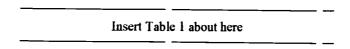
move to improve curricula and the teaching process in higher education. Anderson and Adams (1992) indicated that more attention than ever was being focused on how to meet the challenge increasing diversity in the classroom.

Anderson and Adams (1992) argued that:

One of the most significant challenges that university instructors face is to be tolerant and perceptive enough to recognize learning differences among their students. Many instructors do not realize that student vary in the way they process and understand information. The notion that students' cognitive skills are identical at the collegiate level [suggests] arrogance and elitism by sanctioning one groups' of learning while discrediting the style of others. (p. 19)

Learning style, characterized as field-dependent and field-independent have been widely and extensively studied and has the broadest application to education concerns (Witkins, Dyk, Faterson, Goodenough, & Karp, 1962). Witkin, Moore, Goodenough, and Cox (1977) suggested that students who preferred a field-dependent learning style tended to perceive the world globally, found it more difficult to solve problems, were highly sensitive and attuned to the social environment, tended to favor the "spectator approach" to learning, and would adopt the organization of information to be learned. Additionally, students who preferred a field-dependent learning style were more extrinsically motivated and responsive to social reinforcement.

Conversely, students who preferred a field-independent learning style tended to view the world more analytically, found it easier to solve problems, and were more likely to favor "inquiry" and independent study. In addition, field-independent students tended to provide their own structure to facilitate learning, were more intrinsically motivated, and were generally unresponsive to social reinforcement (Witkin et al., 1977). Table 1 summarizes the characteristics and behaviors associated with field-dependent and field-independent learning styles.



It is important to note that learning styles are not always clustered into neat categories as described. A person's field dependent/independent learning style score, as measured by the Group Embedded Figures Test (GEFT) (Witkin, Ottman, Raskin, & Karp, 1971), falls along a continuum. Whereas extreme scores are common, Witkin et al. noted that the world is not peopled by two distinctly different types of individuals, but rather that learning styles are



distributed on an intermittent plane somewhere between and inclusive of abstract and concrete. Their Group Embedded Figures Test (GEFT) enumerates the degree of abstractness/concreteness on a scale of 0 - 11 (Figure 1).

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Insert Figure 1 about here	

A person with a learning style score that falls near the extreme end of the learning style continuum has a stronger preference for that learning style than a person with the same learning style whose score is closer to the middle. Therefore, the designations, "field-independent," like the designations, "tall" and "short," are relative (Witkin et al., 1971).

According to Garton and Raven (1994) and Dyer (1995), a third category of learners also exists. These individuals score somewhere in the middle of the bipolar scale (Figure 2).

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Insert Figure 2 about here								
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Learning Modalities and Selected Teaching Techniques

The academic term for learning styles is modalities, and there are four major kinds -- kinesthetic, tactual, auditory and visual. Flaherty (1992) offers the following descriptions for four major kinds of learning modalities:

1. Kinesthetic (The doers)

Kinethetic learners are action students. They prefer to do something first and read about it later. They can appear impulsive to educators who generally prefer people to act only after studying first. These students most frequently will read to get meaning, such as consulting a manual on how to assemble a car. They are least likely of the four major groups to read for pleasure.

Kinesthetic students can be recognized by one or more of these traits:



- illegible cursive handwriting
- * a tendency to stand close when they are conversing close enough to be "in your space"
- * poor test takers, although they often appear to know the material
- latent for working with hands-on projects in school

2. Tactual (Sensitive Students)

Tactual students have a heightened awareness of their learning environment. These students are aware of how hot or cold the classroom is and whether it is too light or too dark for learning. Tactual students focus attention on non-verbal communication and are naturals at interpreting its meaning. They learn best in an environment in which they have respect and regard for the teacher. If you want to help these students learn, focus on building rapport with them. Tactual learners are overwhelmed with their ability to connect with people, so they need special attention and an environment that is warm, welcoming, comfortable and caring.

3. Auditory (Yakkety yak)

To comprehend material, they need to read out loud. They never finish those timed tests because they read for comprehension and not speed. Redesign your classes so that 50 percent of what is spoken is said by students. Provide small group discussions where auditory students compare ideas and learn by saying what they think and especially, hearing what they say, how they sound and how they come across to teachers and other students.

4. Visual (The eyes have it)

Visual learners want everything in print: overheads, handouts, books and papers. Visual students review their notes to study for an exam, while kinethetic learners will rewrite their notes to study and auditory students want to talk about it. Use written tests and reports as part of a comprehensive student performance portfolio. Teach by demonstration and observation so that students can reinforce their learning by seeing.



The following are suggested teaching techniques based on selected learning modalities.

Modality	M	oda	ality	
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Technique

Kinesthetic

This student needs a combination of stimuli. The manipulation of material along with the accompanying sights and sounds (words and numbers seen and spoken) will make a big difference to this student.

Auditory

This student will benefit from hearing audiotapes, rote oral practice, lecture or a class discussion. This student will benefit from tutoring another or delivering an explanation to his/her study group or to the teacher.

Visual

This student will benefit from worksheets, workbooks, and texts. Given some time alone with a book, this student may learn more than in class.

Social-Individual

This student needs to be allowed to do important learning alone. Do not force group work on this student. This student will benefit from library assignments. Some great thinkers are loners.

Social-Group

Group interaction is suggested for this student.

Expressive-Oral

Allow this student to make oral reports instead of written ones. Evaluate this student based on what he/ she says.

Expressive-Written

This student needs to be allowed to write reports, keep notebooks and journals for credit and take written tests for evaluation. Oral transactions should be under non-pressured conditions, perhaps even in a one-to-one conference.



Instructional Delivery Methods

The instructional delivery methods described herein, although not necessarily new or creative, have proven valuable over the years. Successful teaching depends to a certain degree upon the initiative, creativity, and risk-taking ability of the instructor. Even instructors with these characteristics, however, must also have a variety of delivery methods and approaches to be a successful teacher. Carey (1987) recommends four instructional delivery methods for teaching school law courses. These delivery methods are:

- 1. Lecture, Handouts, Discussion
- 2. Case Study
- 3. Values Clarification
- 4. Role Playing and Mock Trial

A synopsis of the four instructional delivery methods follows, and it is suggested that although one or another might be most efficient from the instructor's perspective, variety in strategy usually results in the broadest learning among students with diverse learning styles.

1. Lecture, handout, Discussion: This is a traditional teaching technique. Its advantages are that the teacher and the students are familiar with it, and it works, particularly when the lecture partion is dynamic, the handout is succinct, the discussion is lively, includes all students, and stays focused of the objective of that class. For the teacher to succeed in this strategy, there must be thorough preparation, and a classroom environment conducive to student expression.

Example:

Topic- Teachers and the Legal System

Assessment

Using Cameron v. The Board of Education, assign students to read the cases cited by the defendant/plaintiff as precedent to determine the logic that the court used in making the decision. <u>Discuss</u> the logic, and focus on the manner in which the precedent is used to determine future cases.

2. <u>Case Study</u>: The case study method depends on student curiosity and student inquiry. A case or conflict is explored to arrive at some rule of law to govern it and similar factual situations. Case studies can be based on reported



cases, hypothetical cases, or adapted from cases reported in magazines or the local newspaper.

The case study method is grounded in the facts of the case. Facts must be agreed to, and cannot be questioned. Facts are the given. Of course, different facts will be given more or less weight, depending on the position being advocated. Organization of the case under study is framed by the statement of the issue. The legal issue posed by the facts should be framed as a question. The issue is then considered by the creation and presentation of the pro and con arguments. Students enjoy arguing a point of view. Most student s have a point of view after sufficient exposure to the facts of the case and some discussion of the legal issue. Challenge students to devise and argue a position contrary to the one they think is correct. Case study techniques should work toward developing the rule of law that in fact is the objective for the class.

Example:

Topic- Are there special rights for students with disability and non-English speaking students?

<u>Assessment</u>

Assign the student to interview a special education case manager. Have them collect a copy of each of the blank forms that the manager has to complete prior to conducting a multidisciplinary staffing. Have the student review and explain each of the parts of the <u>case study</u>. Note: This is an especially good project for secondary school teachers.

3. <u>Values Clarification</u>: Questioning, arguing, debating, and evaluating student attitudes, beliefs and opinions generates an enthusiastic interest in the law. The class can open with a provocative statement from the teacher to which students will respond. Students can be pressed to clarify and amplify spoken opinion. Students should be encouraged to probe and question their own and another's beliefs. Above all, a high level of tolerance should be maintained. This promotes open discussion, critical thinking, and empathy for the other point of view. The instructor must keep these lessons focused, and maintain enough decorum so that the speaker has the floor until finished and the listeners in fact do listen. Since the law reflects a consensus of ideas in society at any given time, classroom discussion should uncover the underlying reasons for the law as it is and how it developed. Values clarification can be very stimulating to the intellectual process in the students and the instructor.

Example:

Topic - What issues will face the courts in the next decade?



Assessment

Lead a discussion on the attitudes of Generation X. How will the attitudes of that generation be reflected in the future litigation concerning schools?

4. Role Play and Mock Trial: Each of these techniques involves taking a part and playing a part. Role playing and mock trial can evolve from a case study when a case has been mastered and students want to do more with it. If students are confident with material, many will be eager to perform with it. Specific role playing, involving, for example, the direct examination of a witness, will develop easily to the preparation of a full scale mock trial. Mock trial materials are excellent in getting started in this teaching methodology. Role playing and mock trial promote an in-depth analysis of a legal issue which can be at the expenses of broader based learning. Consideration must be given to the time available and the purpose of the program. This will involve students and develop a variety of learning skills.

Example:

Topic - How secure is my employment?

<u>Assessment</u>

Conduct a mock teacher dismissal proceedings. Have the students assume the roles of the defendants, plaintiff, defendant's counsel, plaintiff's counsel, hearing officer (arbitrator), board of education members, and so on. Define and operationalize the concepts of "incompetent," "immoral," "insubordinate," and "conduct unbecoming a teacher." Have the students prepare the script, based upon a real case in their state.

Hypermedia Presentations

A review of the related literature shows that three terms tend to be used to interchangeably--multimedia hypertext, and hypermedia. Smith (1993) reported that "The expressions Hypertext, hypermedia and multimedia are confusing and precise definitions tend to be evasive." (p. 23)

Multimedia -is the combined use of several media such as movie, slides, music, and lighting, especially for the purpose of education, work, or entertainment. Alber (1996) suggested that "A complete multimedia environment would engage all the five human faculties-- sight, sound, touch, smell, and taste." (p. 6)



According to Holsinger (1994), "...multimedia incorporates every type of media ever developed." (p. 3)

The National Education Association (NEA) (1994) reported that hypertext was the "Electronic non-linear access and retrieval of text" (p. 20). The organization reported that "Hypertext is like the hypermedia except that the product only contains units of the text." (p. 20)

Hypermedia -- is the combined use of more than one digitized media (text, still pictures, moving pictures, computer software, or audio) in an interactive format. Bielawski and Lewand (1991) defined hypemedia and noted the interactivity by writing that hypermedia was an "information management tool that links text, graphics, sound, or other types of media in an associative way. In doing so, it allows users of a system to navigate through information in a nonlinear format" (p. 5) as opposed to using the term hypertext. The NEA (1994) used the term multimedia rather than hypermedia noting that "the terms multimedia and hypermedia are often used interchangeably." (p. 20)

Content Quality of Hypermedia Presentations

Six specific elements were identified as impacting content quality. These elements are:

- Accuracy--This concept, supported by Zemke and Armstrong (1996), suggests that the correctness or freedom
 from mistakes and errors of the content must be considered.
- 2. Completeness—Zemke and Armstrong (1996) suggested that one must consider whether the presentation has the depth of information that the members of one's audience needs. This does not mean that the content(s) must be exhaustive, but that the parts, elements or steps necessary to achieve the objective(s) of the presentation are present and up to date.
- Distraction -- Care should be taken to ensure that the attention of members of the audience are not diverted from
 the intent of the presentation or that they are not confused with conflicting emotions or motives. For example,



Thibodeau (1997) reported that while humor might be used "to increase learner interest and to promote recall, it can also backfire and distract from content." (p. 85)

- 4. Need -- Often defined as something requisite, desirable, or useful or as a condition requiring supply or relief, one must determine the level or degree of need for having hypermedia presentation material related to a specific topic. In certain instances, presentation materials which do not reflect all of the characteristics described in this document may be considered useful if no other materials of higher quality are available.
- 5. Social/Political Consideration -- Careful thought should be given to content or relating to the interaction of the individual and the group or the welfare of human beings and the government to determine if it is acceptable. For example, Thibodeau (1997) suggested that one should avoid the use of biases or stereotypes in graphics, animations, and text as they might impact concerns related to gender, ethnicity, religion, etc.
- 6. Structure -- Consideration should be given to the arrangement of the content(s) and how that arrangement fits with one's overall plan for delivery related to the topic. For example, does the structure support one or more theoretical bases for education such as that of behavioral modeling theory (Arends, 1998) or constructivism (Boyle, 1997; Hackbarth, 1996)? In a more general mode, does the hypermedia presentation utilize the concept of chunking--the segregation of the presentation utilize the concepts on is dealing with and the development of short, focused documents about each concept as recommended by Plaffenberger (1997)?

Design Quality of Hypermedia Presentations

Wolfgam (1994) suggested that the developers of such presentations should use a consistent style. That is, the developer should utilize a distinctive manner of expression or a particular manner or technique by which something is done, created, or performed or a distinctive quality, form or type of something. Such consistency not only makes the overall development of a presentation easier but assists the user since the operations performed in using a particular presentation would be consistent.



Color -- While color has been shown to have a positive impact on the members of the audience in terms of holding their intention and promoting retention of the content(s) of a presentation, there are a number of concerns regarding the use of color. Pinheiro (1996) suggested that an excessive number of colors should not be used. In 1997, Trautman recommended that no more than 10 colors should be incorporated into presentation. In addition, the color of backgrounds should selected carefully so as to enhance the presentation, not overpower the viewer (Trautman, 1997). Another concern related to color has to do with the hardware and programs used to support the presentation. As viewed by a user, colors assigned to various elements of the presentation may vary from program to program and from display device to display device.

Image Size -- In creating an image, the developer should take steps to ensure it will be sufficiently large to permit users to feel confortable in dealing with the level of detail which is required but yet will operate on the available hardware. Minute details may require that enlarged sections of an image be displayed while images with few small details can provide more of an overall view. It was suggested by Pinheiro (1996) that less than half of the available screen space should be provided for the viewer's benefit.

User Control -- The user of a hypermedia presentation should be able to guide or manage the operation of the presentation as this will tend to minimize any possible frustration levels and to enhance the user's interest in the presentation's content(s).

Media -- The means of effecting or conveying content(s) in a hypermedia presentation are very important. In reflecting on this area of concern, Zemke and Armstrong (1996, p. 51) suggested that the following questions be considered.

- 1. Is the use of multiple media purposeful or just stunt-flying?
- 2. Do the media elements work together smoothly or do they compete for your attention?
- 3. ...how well are they integrated?

In addition, consideration should be given to programs and hardware which will be available to potential users of the presentation. Many educators have found that though they have access to excellent presentations, those presentations cannot be easily used in the available educational environment. Information related to various types of media should be considered in preparing hypermedia presentations.



Text -- The written or printed matter on a page screen should adhere to certain guidelines for a presentation to be effective and efficient.

Animation -- The act of moving to action, especially giving an inanimate object movement or activity, is an effective technique which has proven very useful in the preparation of hypermedia presentations. However, Wolfgram (1994) emphasized that one should only animate an object when such movement has a specific purpose in the presentation. He suggested that animation might be used to "Enhance emotional impact," "Make a story point," "Provide a transition to another section of the presentation." (pp. 67-68)

Audio --Three categories of sound are often used as part of hypermedia presentations: music, sound effects, and narration. According to Wolfgram (1994), each of the catergories should be used only when it enhances the presentation. He suggested that music sets the mood, enhances emotions of an important segment, or illustrates particular points in the presentation. Sound effects, on the other hand, should be planned to enhance the presentation --never used just for back ground noise. Narration --human voice or a representative sample thereof -- helps the audience to relate to the contents of the presentation.

Video -- Recorded or live images displayed through a television or computer screen are, according to Wolfgram (1994), best used when a particular point can be made only with video. He reported that the decision to use video was one of the most difficult for the developer because of differences in hardware and software which might be used to support the presentation. For example, video images saved as electronic files require a large amount of storage space. Will the user have sufficient storage capacity to handle the storage of such files? Decisions relative to extensive uses of such files are crucial as the developer often has little control over the environment in which the presentation is used. One last suggestion from Wolfgram (1994) was "Don't sacrifice message delivery for technology's sake." (p. 81)

Images -- Reproductions or imitations of the form of a person or thing play a large role in many hypermedia presentations. Trautman (1997) recommended that images be of good quality; relevant, not just a time killer; up to date; suited to the audience; and suited to the developer's purposes. She also suggested that the images should add to the presentation; add variety; change focus; or add interest.

Howles and Pettengill (1993) stated that progressive disclosure might be used to advantage if one needs to illustrate a complex concept by including a lot of pieces of information on a single screen, gradually revealing the



information. Use of this technique enables the viewer to focus on one critical idea at a time and not get distracted by the other informational elements on the screen.

Navigation -- This concept, which is at the very heart of hypermedia presentations, refers to how one progresses through a nonlinear presentation, refers to how one progresses through a nonlinear presentation. Wolfgram (1994) wrote that a viewer must always know where he/she is, how he/she got there, and how to proceed from there to somewhere else. If not, the developer has lost the viewer. Successful message delivery depends on keeping the viewer's attention focused on the subject. If the viewer has to spend time figuring out where he/she is, he/she will lose track of the main message he/she has been receiveing.

Another aspect of navigation deals with how input devices are used to interact with the material presented. This depends heavily on conventions that the developer establishes early in the production of the presentation. "A convention is nothing more than determining a specific way of doing things and then sticking to that determination" (Wolfgram, 1994, p. 104). For example, buttons and menus should be in the same place on the screen throughtout the presentation. These are simple conventions that will help a user learn the system so that valuable time is not wasted in figuring out what to do next. Use standard established by others where they are available.

Menus are often used as a visual aid to navigation according to Wolfgram (1994). He suggested that menu items or buttons be darkened to show that opinion has already been selected and that no inactive menu items or buttons be displayed. He also recommended that the number of choices on any single menu be limited to five or fewer.

Hyperlinks, devices that provide the viewer with a means to quickly access any information that is of interest, was reported by Wolfgram (1994) as being used more as an indexing system than as a navigation tool. A developer should use a hyperlink only to link related information. It has been observed that hyperlinks are often oversused. It was suggested that the links should be made to stand out against non-linked objects by using a different font or color.

Regardless of the techniques used to move through a hypermedia presentation, Pinheiro (1996) suggested that one always provide opportunities for the user to navigate to all relevant parts of the presentation.

Record Keeping -- Often there is a need to store in some manner evidence that a particular activities took place or that a particular level of performance occured. The individual designing hypermedia programs must decide what type information will be retained regarding a user's activities and performance. This has become very important with the learner



taking greater control of a presentation as it became necessary that detailed records be maintained to ensure that the individual got the most from the presentation. As an educator having individual learners use hypermedia presentations, one needs to ascertain if the necessary records will be accessible for determining whether an activity was completed or for completing a learner assessment.

Security -- This refers to measures taken to ensure that the content(s) of the presentation are not altered or guard against the unrestricted release of private information such as a learner's grade or performance evaluation and to prevent the unathorized tampering with the accuracy of such information. In the latter case for example, if a presentation used by a learner tracks the learner's responses to quiz items and those responses are recorded, is it possible for that or another individual to change the data so a true record is not refleceted?

Pacing/Timing -- the total time required for using a prepared presentation and the speed with which a presentation can be usefully completed should be of concern in the development and/or selection process. Wolfgram (1994) suggested that one should determine the length of time that the presentation will run before getting into detailed design of the presentation. He defined this running length as including both the length of each section and to the total running time. He stressed that each section of the presentation should run no longer than necessary to make a particular point.

A general recommendations regarding the total running time of presentations, Wolfgram (1994) suggested the following:

- 2 3 minutes -- self-running presentation;
- 5 6 minutes for presentations with some limited interactivity; and 15 minutes for a completely analytical, handson presentation which includes some vehicles to make sure that the viewer comes back to the presentation again and again.

The presentation should be designed so it keeps moving. While moving things along a s quickly as the system will allow is a viable goal, Wolfgram (1994) stressed that should be done only as long as the message delivery is not compromised by the pace. He also noted that transitions between slides or sections should also be an indication of real time, where appropriate. For example, in a storytelling presentation, slow dissolves might be used to indicate a time delay while a quick cuts might be used to show two views of the same scene at the same moment in time.

In trying to plan for adequate time allowances, slowly reading a block of copy twice is a good way to determine how long to allow for a view to read it. As a developer, one will often understimate the amount of time which will actually



be required for using a presentation because of one's familiarity with the presentation.

Wolfgram (1994) suggested that the only proven vehicle for getting any user to last more than 15 minutes is a highly interactive situation involving user control with lots of feedback, such as a game or financial analysis program. This can be an effective implementation, but in most cases it is better to limit oneself to a 10-minute presentation with gimmicks that promote multiple viewing sessions.

Conclusions/Point of View

In light of the paucity of literature concerning selected delivery methods and teaching techniques for school law courses, the author suggests that school law professionals review the following facts prior to the teaching of school law courses:

As teacher educators, we invest a great deal of time thinking about and preparing for what we should teach. Likewise, we should spend an equal amount of time thinking about and preparing for how we should teach. How we teach should be directly correlated to the learning styles of the students in the class. Cano (1991) suggested that responsibilities of the instruction are to encourage all learners to learn, provide choices for learners, and above all else, adapt the teaching style to fit the learning style of learners. "If students cannot learn in the way they are taught, then they must be taught the way to learn" (Marshall, 1990, p. 62). Torres and Cano (1994) supported this ideology by indicating that students should have knowledge of their learning style in an effort to learn more effectively and efficiently. Further findings (Dunn & Dunn, 1979; Claxton & Murell, 1987) have indicated that when teaching methods were governed by student learning styles, the results were higher test scores, improved attitudes toward school and learning, improved student behavior, and greater learning. The challenge for school law professionals is to assess the learning style characteristics of each student and to provide learning opportunities that are compatible with those characteristics. Diagnosing and interpreting learning styles provides data as to how individuals perceive, interact, and respond to the learning environment.

In responding to the learning environment, Cross (1976) stated that people see and make sense of their world in different ways. Dunn &Dunn (1979) contended that "teachers teach the way they learned." (p. 241) Consequently, because



teachers tend to teach the way they learn, they often fail to recognize the different learning styles found within their classrooms. Therefore, having knowledge regarding the learning styles of students can be of assisstance to the teacher in selecting instructional materials, teaching methods, and learning activities to be used in the teaching-learning process (Turner, 1985).

Professors that are field dependent learners tend to teach in ways that facilitate field dependent learners and teachers who are field independent learners tend to teach in ways to facilitate field independent learners (Jacobson, 1992; Garger & Guild, 1984; Smith, 1982; Dunn & Dunn, 1979). Unfortunately, few teachers consider that the students have preferred learning modes (learning styles) that may or may not be that same as theirs! It is almost assured that in any given college course some students'learning styles will be aligned with the teacher's teaching style. Conversely, there will be students who are not aligned with the teachers style of delivering instruction.

School law professionals must be vigilant in selecting and employing curricular and instructional modalities which relate to a wide array of learning styles. This may be of particular concern when instructors make decisions for first year graduate students or secondary school teachers.

Instructional plans provide the framework for the interactions between learners and instructors and/or learners and resource materials for each educational activity. They spell out the anticipated end product, the content, the intructional techniques, and the evaluation strategies that make up the instructional process. In designing instructional plans, school law professionals need to complete the following tasks:

- * Develop clear and understandable learning objectives for each instructional session.
- * Select and sequence the content based on the participants' knowledge and experiences, the nature of the content itself, and the instructor preference.
- * Choose instructional techniques that match the focus of the proposed learning outcomes and that the instructor is capable of using. (These might include lectures, case studies, role playing, and debates.
- * Selecet and/or develop instructional material that will enhance the learning effort.
- * Choose an evaluation component for each instructional segment that will enhance participant learning and assisst in ascertaining whether the instructional event actually produces the desired result.

Clear and concise instructional plans provide guideposts for instructors that can help them stay focused as they move



through the instructional process.

The use of hypermedia presentations is not the answer to all educational concerns. Because a lesson utilizes multimedia technology doesn't necessarly make it superior to traditional instructional methods. The cornerstone to any effective learning experienced lies in the instructional design. According to Howles and Pettengill (1993), when you combine sound instructional design principles with the state-of-the art teaching tools, only then will the true potential of multimedia in education becomes fully realized.

It is important not to loose sight of teaching goals as you master the technology. The best advice with regard to pedagogy is to take time to explore, exploit, and experiment with integrating the unique features of the technology into your teaching environment. Think beyond the traditional classroom paradigms as you begin creating your on-line-or technology based materials, and consider incorporating a few new learning paradigms into your school law classes.

Clearly, different technology will appeal to different learning styles. The danger is in assuming that all students will adapt to the new educational technologies with equal readiness and enthusiasm. School law professionals and administrators therefore, must be sensitive to the differences in learning styles required by the new technologies.

If we are aware of the demands different technologies make on us, and understand why we like or dislike certain ones, perhaps we will be more patient with that computer or laser disk. Maybe we can be more appreciative of a particular student's finesse with a certain tool. And possibly, we can be less critical of ourselves and more flexible in our approach to the instructional delivery of school law courses.



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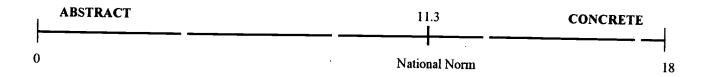


Figure 1. GEFT Learning style scores.



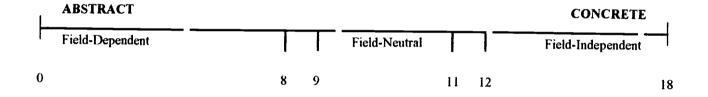


Figure 2. Classification for GEFT Scores





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